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Adjuvant composition and methods for its use

Abstract

An adjuvant composition which is a stable oil-in-water emulsion comprising a metabolizable oil, one or more surfactants, an antioxidant and a compound to make the emulsion isotonic is described and claimed. The stable emulsion has a hydrophobic-lipophilic balance (HLB) of from about 7.5 to about 10.5 and a particle size of less than 3 .mu.m. In a preferred embodiment, the stable emulsion comprises 10% volume to volume squalene, 0.09% weight to volume PLURONIC F-68 block co-polymer, 1.9% weight to volume egg phosphatidyl choline, 1.75% volume to volume glycerol and 0.05% weight to volume .alpha. tocopherol. The preferred emulsion has a HLB of 8.0 and a particle size of about 0.2 .mu.m. In a particularly preferred embodiment, the stable emulsion is combined with an attenuated lipid A derivative such as monophosphoryl lipid A or 3-deacylated monophosphoryl lipid A to enhance the adjuvanticity of the composition.